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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,461	03/05/2004	Cheng-Chieh Huang	ALIP0035USA	2460
27765 7590 02/08/2008 NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			EXAMINER JONES, HEATHER RAE	
			ART UNIT	PAPER NUMBER
			2621	
			NOTIFICATION DATE	DELIVERY MODE
			02/08/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/708,461

Applicant(s)

HUANG, CHENG-CHIEH

Examiner

Heather R. Jones

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 is/are allowed.
- 6) ☒ Claim(s) 6-11, 13-16 and 18 is/are rejected.
- 7) ☒ Claim(s) 12 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 13 and 3-18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 6-11, 13-16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Archer et al. (U.S. Patent 5,473,229) in view of Kosaka et al. (JP 2000-267770).

Regarding claim 6, Archer et al. discloses a method for detecting whether an output port of a circuit is electrically connected to an output cable, the method comprising: (a) receiving a signal from the output port; (b) determining whether the output port is electrically connected to the output cable according to a signal voltage of the output port (abstract). However, Archer et al. fails to disclose (c) operating the circuit in a normal mode when it is determined that the output port is electrically connected to the output cable and (d) operating the circuit in a power-saving mode when it is determined that the output port is not electrically connected to the output cable.

Referring to the Kosaka et al. reference, Kosaka et al. discloses a method for detecting whether an output port of a circuit is electronically connected to an output cable, wherein the method discloses operating the circuit in a normal mode when it is determined that the output port is electrically connected to the output cable and operating the circuit in a power-saving mode when it is determined that the output port is not electrically connected to the output cable (abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have implemented the power saving mode disclosed by Kosaka et al. in the method disclosed by Archer et al. in order to suppress the power consumption of the device.

Regarding claim 7, Archer et al. in view of Kosaka et al. discloses all the limitations as previously discussed with respect to claim 6 including that step (b) comprises determining whether the output port is electronically connected to the output cable is according to whether the signal voltage of the output port is larger than a predetermined signal threshold (Archer et al.: abstract).

Regarding claim 8, Archer et al. in view of Kosaka et al. discloses all the limitations previously discussed with respect to claims 6 and 7, but fails to disclose that it is determined that the output port is not electrically connected to the output cable when the signal voltage of the output port is larger than the signal threshold. However, Archer et al. discloses that when the output port is not electrically connected to the output cable the signal voltage of the output port

is smaller than the signal threshold (col. 10, lines 15-35). Official Notice is taken that the threshold voltage and comparator can be changed to determine that the output port is not electrically connected to the output cable if the signal voltage of the output port is larger than the signal threshold. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the threshold smaller than the output voltage when the cable is not detected based on the design choice.

Regarding claim 9, Archer et al. in view of Kosaka et al. discloses all the limitations as previously discussed with respect to claim 6 including that step (d) further comprises providing a low power detecting signal to the output port when the circuit is operating in the power-saving mode (Archer et al.: col. 10, lines 36-41 – the detecting signal has to have a non-zero average power in order to detect signal changes; Kosaka et al.: abstract).

Regarding claim 10, Archer et al. in view of Kosaka et al. discloses all the limitations previously discussed with respect to claims 6 and 9, but fails to disclose that the method further comprises comparing whether the signal voltage of the output port is larger than a predetermined threshold when the circuit is operating in the power-saving mode. However, Archer et al. discloses that when the output port is not electrically connected to the output cable the signal voltage of the output port is smaller than the signal threshold (col. 10, lines 15-35). Official Notice is taken that the threshold voltage and comparator can be changed to determine that the output port is not electrically connected to the

output cable if the signal voltage of the output port is larger than the signal threshold. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the threshold smaller than the output voltage when the cable is not detected based on the design choice. Furthermore, once it is determined that the cable is not connected the apparatus will keep checking to see if the cable is reconnected (Archer et al.: col. 7, lines 17-21 – integrity check).

Regarding claim 11, Archer et al. in view of Kosaka et al. discloses all the limitations previously discussed with respect to claims 6, 9, and 10 including that it is determined that the output port is not electrically re-connected to the output cable when the signal voltage of the output port is less than the detecting threshold (Archer et al.: col. 10, lines 15-35).

Regarding claim 13, Archer et al. in view of Kosaka et al. discloses all the limitations previously discussed with respect to claims 6, 9, and 10 including that the method further comprises providing an output signal to the output port when it is determined that the output port is electrically re-connected to an output cable, and comparing whether the signal voltage of the output port is larger than a predetermined detecting threshold, then determining whether the output port is electrically connected to the output cable according to the comparison result (Archer et al.: col. 7, lines 17-21 – integrity check; col. 10, lines 15-35).

Regarding claims **14-16**, these are apparatus claims corresponding to the method claims 6, 7, and 10. Therefore, claims 14-16 are analyzed and rejected as previously discussed with respect to claims 6, 7, and 10.

Regarding claim **18**, Archer et al. in view of Kosaka et al. discloses all the limitations previously discussed with respect to claims 14 and 16, but fails to disclose a storing circuit for providing a data signal and reading the data on an optical disc to generate the data signal. However, Archer et al. discloses a personal computer. Official Notice is taken the personal computers can read optical discs. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the personal computer produce the data signal from the disc.

Allowable Subject Matter

4. Claims 1-3 are allowed.
5. The following is an examiner's statement of reasons for allowance: Prior art fails to teach or fairly suggest an output circuit and method comprising: further comprising amplifying the signal voltage of the output port when it is determined that the output port is not electrically connected to the output cable, and comparing whether the amplified signal voltage of the output port is larger than a predetermined detecting threshold, then determining whether the output port is electrically connected to the output cable according to the comparison result.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Claims 12 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: Prior art fails to teach or fairly suggest an output circuit and method comprising: further comprising amplifying the signal voltage of the output port when the circuit is operating in the power-saving mode, and comparing whether the amplified signal voltage of the output port is larger than a predetermined detecting threshold, then determining whether the output port is electrically connected to the output cable according to the comparison result.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather R. Jones whose telephone number is 571-272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a


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USPTO Customer Service Representative or access to the automated information
system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Heather R Jones
Examiner
Art Unit 2621

HRJ
February 2, 2008



JOHN MILLER
SUPERVISORY PATENT EXAMINER
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